

Determination of Public Land (Rangeland) Health for 64059 RUSSELL FARM

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these Standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on the assessments, it is my determination that the Public Lands within the Russell Farm #64059 meet the Upland Sites Standard and (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) the Riparian Standard (on identified sites).

/s/ T. KREAGER

Assistant Field Manager

09/26/2003

Date

Standards of Public Land Health

Evaluation of 64059 RUSSELL FARM Allotment

[09/04/2003]

The Roswell Field Office conducted rangeland health assessments at one study site within the RUSSELL FARM Allotment #64059. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
64059-IDSU-A161	X			X			X		

Twenty-two (22) indicators for Rangeland Health were evaluated for the Russell Farm allotment; 10 of these indicators assessed soil/site stability, 11 assessed hydrologic functions and 13 assessed biotic integrity. These qualitative assessments, along with quantitative information from monitoring studies on one (1) study area, were utilized to assess the rangeland health of the public land within the allotment.

Wildlife and TE - The primary concerns are the newly discovered population of Pecos sunflower, aquatic resources associated with the Pecos River, riparian condition and floodplain health. Habitat conditions as observed this year are very good in the upper third of the 160-acre strip of BLM for the sunflower. The riparian area along the Pecos River is currently protected by an enclosure on the west side of the river. Saltcedar remains a problem along the river and on public land on the two parcels of public land. Floodplain conditions appear good with exception to developments that have occurred in the past affecting portions of the floodplain (water storage facility owned the City of Roswell) and ongoing/unmonitored saltcedar clearing by either CID or Chaves Co. flood control.

Range - This allotment is located along highway 380 east of Roswell near the Pecos River. The Ranch is located on both sides of the highway, however public lands are located north of the highway. There are two parcels of public land within this allotment, please see map for the locations. The entire area is within the salty bottomland range site with varying degrees of salt concentration.

The majority of the lands within this allotment are privately owned and are under a long term grazing lease. During drought conditions (current conditions) livestock numbers are

reduced to conserve forage. The BLM grazing permit does not control the overall livestock numbers due to minimal acreage.

The allotment is operated yearlong, and livestock are rotated through the various pastures. Generally, the portion of the ranch north of the highway is utilized during the dormant season. Goldenrod toxicity is somewhat of a problem in the area and the operator attempts to control it with herbicide. The allotment operator constructed a fence which creates a riparian pasture along the Pecos River. This pasture is not currently utilized by livestock due to chronic fence cutting and off-road driving by recreationsists using the Pecos River.

As mentioned under the wildlife section, there has been efforts by Chaves County Flood Control to mechanically remove salt cedar. The smaller trees have been effectively removed, but larger trees in small depressions still exist. The herbaceous vegetation response to the control efforts has been varied. Areas with less salt content, or sub-irrigation have responded well. Areas with high salt content have not responded as well. The on-going drought may also have some influence as to the vegetative response.

Vegetation closer to highway 380 is less dense and robust than to the north. This is because of less sub-irrigation and past disturbance from reservoir construction for the salinity treatment plant. It also appears that livestock may congregate on this portion of the ranch during the dormant season because of water and feeding locations.

Based on the conditions assessed for each indicator, this allotment will meet the standards for riparian, biotic and uplands.

Recommendations: Wildlife and TE - Maintain the existing riparian exclosure, continue saltcedar eradication by extraction to reduce surface damage, consider negotiating a new pasture configuration to allow rest of the upper third of the allotment (new fences). Consider land exchange to better block up the public land with the Bitter Lake National Wildlife Refuge to the east. Continue monitoring grazing pressure on sunflower habitat and development a season of use if grazing pressure adversely affect the new population.

Range - Recommend continuation of salt cedar eradication and allow grazing operator to utilize herbicide for goldenrod on BLM lands. Continue grazing rotation through pastures and maximize the use of existing fences as much as possible. New fences may not be cost effective, and existing conditions on the north portion of the allotment appear to be adequate for T&E plant populations. BLM coopreation with the grazing operator should encourage proper grazing use to enhance the T&E populations.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64059-IDSU-A161			
Legal Land Desc	NESW 33 0100S 0250E Meridian	Acreage	400
Ecosite	042CY033NM SALTY BOTTOMLAND S	Photo Taken	N
Watershed	13060007010 GOPHER		
Observers		Observation Date	
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	Hp	Soil Taxon Name	HOLLOMAN
Texture Class	NM666 L	Soil Phase	HOLLOMAN-GYPSUM LAND
Texture Modifier	NM666 LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	11.8	NOAA Growing Season Precipitation	7.46
NOAA Avg Annual Precipitation	11.9	NOAA Avg Growing Season Precipitation	9.54
Disturbances and Animal Use:	<p>No livestock were observed on this allotment.</p> <p>Access is difficult, we accessed from city property east of the desalination plant after getting combination from the city.</p> <p>Salt Cedar scattered throughout, some of the area has been grubbed by the County Flood Control. Some dense stands of salt cedar left in depression areas.</p> <p>The north end of the allotment is sub-irrigated.</p> <p>The gate between Blackwell allotment and this one is open. Two mules were in the area.</p> <p>The city of Roswell owns lands within the allotment that has large reservoirs that were constructed for the desalinization of salty water.</p> <p>The majority of the lands within this allotment are privately owned and</p>		

	are under a long term grazing lease. The existing grazing lease is for 100 Animal units yearlong. During drought conditions (current conditions) livestock numbers are reduced to conserve forage. The BLM grazing permit does not control the overall livestock numbers due to minimal acreage.
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Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:	Dependant on ground cover. Bare salty areas show flow patterns.					
S H	Pedestals and/or Terracettes				X	
Comments:	Predominately in water flow patterns.					
S H	Bare Ground				X	
Comments:	Dependant on soils and salt content.					
S H	Gullies				X	
Comments:	Small gullies present in the barren salty areas.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:	Dependant on vegetative cover, soil dependant.					
S H B	Soil Surface Resistance to Erosion				X	
Comments:	Matches expectations, bare salty areas with less ground cover are prone to erosion.					
S H B	Soil Surface Loss or Degradation				X	
Comments:	Matches expectations, bare salty areas with less ground cover are prone to erosion.					
H	Plant Community Composition and Distribution Relative to Infiltration and				X	

	Runoff					
Comments:	Some areas have less grass cover than expected, particularly in the south end.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	North end is good, good diversity abundance. South end lacks the diversity. Alkali Sacaton, inland salt grass, pickleweed, etc.					
B	Plant Mortality/Decadence				X	
Comments:	Exceed observers expectations given the drought conditions.					
H B	Litter Amount				X	
Comments:						
B	Annual Production				X	
Comments:	Good production given drought conditions, particularly in the north end.					
B	Invasive Plants			X		
Comments:	Salt cedar, goldenrod.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:						
B	Wildlife Habitat				X	
Comments:	A majority of the allotment is within the Pecos River floodplain and to a lesser extent the Hondo and Berrendo drainages. Wildlife habitat is grasslands and wetlands, including a portion of the Pecos River along the east, and would include aquatic habitat as well.					
B	Wildlife Populations				X	
Comments:	No specific wildlife population information available. Species of concern include waterfowl and shorebirds, various neotropical migrants, and nongame terrestrial wildlife species, and aquatic species associated with the Pecos River. Habitat is relatively undisturbed and in excellent condition in the upper third of the allotment.					
B	Special Status Species Habitat					X
Comments:	Puzzle sunflower present, new populations identified. The allotment is adjacent to the BLNWR where extensive populations are found in Hunter's Marsh. Habitat conditions are excellent in the upper third, although plants can be found throughout the allotment where water and soil conditions permit. The Pecos River aquatic habitat is important for TE fish species. In					

	areas of more longlasting water, the potential for federal proposed snail species occurring is low to moderate as these species have only been found on the adjacent BLNWR at this time.					
B	Special Status Species Populations				X	
Comments:	At least six different Puzzle sunflower sites were identified. About 600 to 700 plants were found this year. It is expected that the new populations will continue to thrive under the very low grazing pressure on the allotment noted this year. No specific fish population estimates are available at this time.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	7	3
H	Hydrologic	0	0	0	9	2
B	Biotic	0	0	1	10	2

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	1	12

Site Notes: This allotment contains two parcels of Public land. Access was limited to the eastern parcels, so this assessment was conducted on the western parcel.

The north end of the parcel looks great. There are pockets of salt cedar that could be removed.

New populations of puzzle sunflower were identified.

Salt cedar treatment has been conducted in the past by other government agencies. They left some pockets of salt cedar in depression areas however.

small gullies present in high salt content soils where less vegetation is present.

The east parcel of BLM has Riparian area along the Pecos River. This area is fenced into a separate riparian pasture.

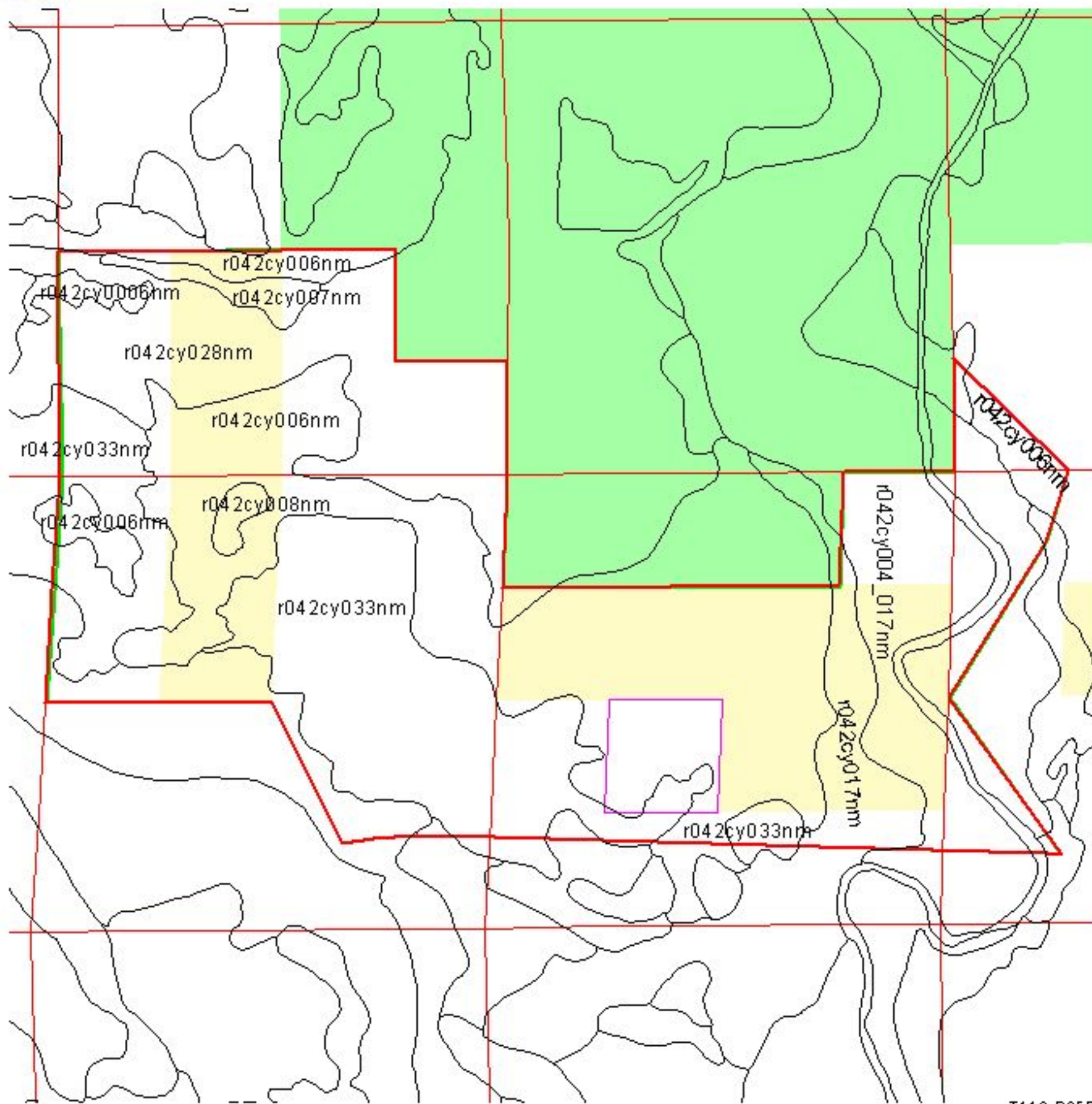
Wildlife and TE - Six individual Pecos sunflower sites were GPSed on 9/11/03, locations on file. Up to 700 plants were found. Plants were found in lowlying areas with a relatively high soil moisture content and excellent ground cover. It is expected that the population will continue to thrive under the low grazing pressure observed at this time. Need to continue monitoring the area for grazing pressure.

64059





T10 S. R25 E



T11S,R25E

0.2 0 0.2 Miles



Public



Study Plots



FVV S



Pasture Boundary



Ecological Sites



Allotment Boundary



State



Private

Produced by the Roswell Field Office
GIS Intern on July 8, 2003.

His laboratory is one of the few centers of Latin American research in the country, and he has developed a special interest in the history of education in Latin America, particularly in the area of the development of the educational system in the last century. He is also interested in the history of the educational system in the United States, particularly in the area of the development of the educational system in the last century. He is also interested in the history of the educational system in the United States, particularly in the area of the development of the educational system in the last century.

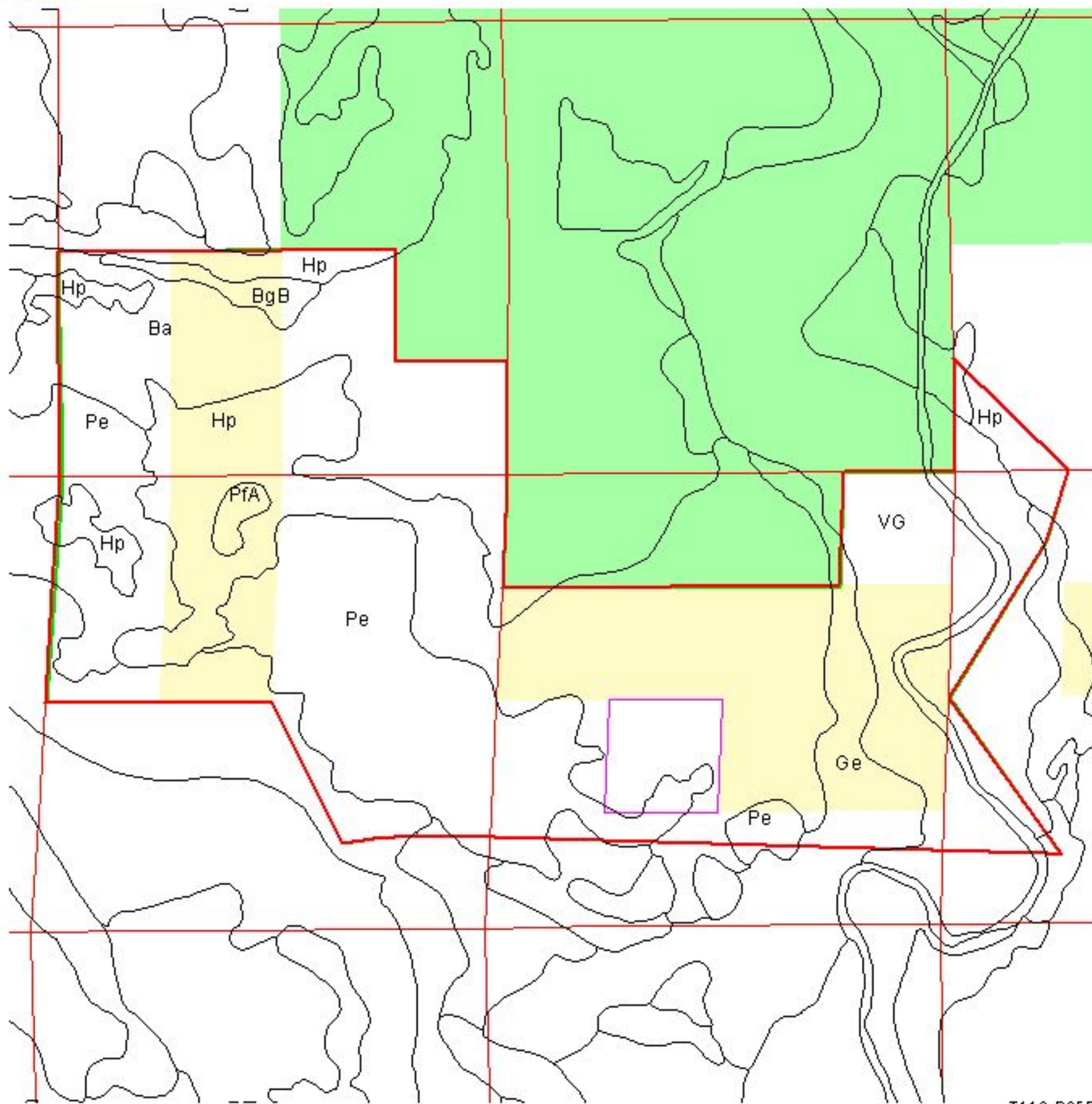


Rangeland Health Assessment Soil Mapping Units

Allotment 64059



T10S.R25E



T11S.R25E

0.2 0 0.2 Miles



Public



Study Plots



FWS



State



Private



Pasture Boundary



Soil Mapping Units



Allotment Boundary

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